

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



January 30, 2018

GI-2017-10-SCG43-07

Jimmie Cho, Senior Vice President
Gas Operations and System Integrity
Southern California Gas Company
555 West 5th Street, GT21C3
Los Angeles, CA 90013

**Subject: General Order (G.O.) 112¹ Comprehensive Operation and Maintenance Inspection
of Southern California Gas Company Facilities at Aliso Canyon Storage Field**

Dear Mr. Cho:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a G.O. 112¹ Comprehensive Operation and Maintenance Inspection of Southern California Gas Company's (SCG) Aliso Canyon Storage Field on October 30 through November 4, 2017. The inspection included a review of the Inspection Unit's Corrosion Control (Internal, External, and Atmospheric), Critical Valves, Compressor station, Leakage Survey, Patrolling, Relief Valves, welding, and Odorant records for calendar years 2014, 2015, 2016, and 2017 and field inspections of pipeline facilities at Aliso Canyon Storage Field. SED's staff also reviewed the Inspection Unit's Operator Qualification records, which included field observation of randomly selected individuals performing covered tasks.

SED's staff made eight recommendations. The recommendations are noted in the attached "Summary of Inspection Findings".

Please provide a written response within 30 days of your receipt of this letter indicating the measures taken by Sempra to address the recommendations noted in the "Summary of Inspection Findings". If you have any questions, please contact Mahmoud (Steve) Intably, at (213) 576-7016.

Sincerely,

A handwritten signature in blue ink, reading "Kenneth A. Bruno", is positioned above the typed name.

Kenneth Bruno
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division

CC: Mahmoud (Steve) Intably, SED/GSRB, Matthewson Epuna, SED/GSRB, Kan Wai Tong, SED/GSRB, and Troy Bauer, Sempra Energy Utilities

¹ General Order 112-F was adopted by the Commission on June 25, 2015 via 15-06-044

Summary of Inspection Findings
2017 SCG Aliso Canyon Storage Field O&M Comprehensive
October 30 - November 4, 2017

I. SED Identified Probable Violation

None

II. Concerns and Recommendations

1. Title 49 CFR, Part 192, §192.481 Atmospheric corrosion control: Monitoring.

§192.481 Atmospheric corrosion control: Monitoring states in part:

(b) "During inspections the operator must give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water."

SCG's Gas Standard 184.12 Inspection of Pipelines on Bridge and Spans requires SCG's employees to inspect pipe support for evidence of improper insulation between the support and the pipe, damaged supports, and deterioration of protective coating (for painted pipe - any chips, cracks, and/or flaking).

SED observed during the field inspection that SCG's above ground pipelines had the following deficiencies that were not identified during SCG patrolling:

- Pipelines were in contact with the pipe supports (bracket) and had light surface rust
 - The pipe supports were not insulated from the carrier pipeline. Micarta or fiberglass reinforced plastic pads were missing between the supports and the carrier pipeline starting at valve number 473A
 - Pipe supports were damaged (cracked, broken, etc.) for Line 5025 (V/S W3 to V/S W4 including well site SS-9), Bracket ID 8W11, 8W10, and 45W-9
 - Pipelines had atmospheric corrosion damage (rust, pitting, or loss of metal from the pipe) at AC-5025-1180-E1, 5025-W3-W4, AC-5025-W11-5531, and AC-5025-W4-SS25
 - Pipe at SS-25 had a missing support (2-inch pipe)
2. SCG's Gas Standard 184.12 Inspection of Pipelines on Bridges and Spans requires SCG's employees to complete the "Bridges and Spans Checklist". During records review, SED noted that the following work ordered numbered 6092813, 6091547, and 6091570 had a missing "Bridge and Span Checklist"

3. SCG's Gas Standard 184.12 Inspection of Pipelines on Bridges and Spans, which describes the policies and procedures for inspecting transmission and distribution piping on bridges and spans and it references Title 49 CFR, Part 192, §192.481 Atmospheric Corrosion Control: Monitoring. Part 192 §192.481 not only addressed pipelines on bridges and spans but also any portion of a pipeline that is exposed to the atmosphere. SED recommends that SCG take the necessary steps to review/revise the procedure and make editorial changes to the procedure to be consistent with the regulation (pipeline exposed to atmospheric corrosion) and to eliminate any confusion.
4. SCG's Gas Standard 223.0215 Valve Inspection and Maintenance – Transmission requires SCG's employees to inspect valve identification tags for lettering legibility and numbering accuracy. During the field inspection, SED observed that relief valve W/D Line-SS-9 (PSV982-1) had a different ID number in MAXIMO work order inspection report. SED recommends that SCG verify that the relief valve has the correct identification tag.
5. SCG's Gas Standard 223.0215 Valve Inspection and Maintenance – Transmission requires SCG's employees to inspect valve identification tags for legibility and correct numbering. During the field inspection, SED observed that relief valve Porter 25-R (PSV-9-1) had a different ID number in MAXIMO work order inspection report. SED recommends that SCG verify that the relief valve has the correct identification tag.
6. During the field inspection of the cathodic protection system, SED noted that some monitoring locations had low CP reads, deactivated or no longer existed. SED recommends that SCG review all CP packages and data to ensure the number of routine monitoring points are adequate to ensure adequate level of cathodic protection for the entire system and to ensure compliance with Title 49 CFR, Part 192, §192.463 External Corrosion Control: Cathodic Protection.
7. During the field inspection, SED noted that relief valve PSV9821-1 did not operate as intended. SED recommends that SCG take the necessary steps to ensure the relief valve opens at the correct set pressure.
8. During the field inspection of the control Room, SED noted that the "Emergency Binders" that contained SCG's Emergency Plan and Gas Standards had SCG's Gas Standard 183.0105 and SCG Gas Standard 183.0075 that were not contain the company's most recent updated version. SED recommends that SCG review the "Emergency Binders" and update all Gas Standards to ensure that they contain the most recent version.